

**REMARKS**

Claims 15-18, 21-31, and 37-41 are pending in this application.

The Office objected to the disclosure of the application because it asserted that the priority information on page 1 did not reflect the current status of the corresponding applications. See Office Action of February 27, 2004, at page 2. The specification has been amended to include the numbers of the patents issued from the priority applications. Applicants respectfully request that the objection be withdrawn.

35 U.S.C. § 112, second paragraph

On page 2 of the Office Action, claims 15-18, 21-27, 29-31, and 37-41 were rejected under 35 U.S.C. § 112, second paragraph, because the Office found certain claim elements to be indefinite.

First, the Office found the element of "part of the N-terminal region of a polypeptide is" in claims 15, 17, and 21 to be indefinite. Claims 15, 17, and 21 have been amended to include the term "wherein the nucleotide sequence comprises an about 3 kb sequence of a *HindIII-PstI* DNA fragment derived from *Bacillus thuringiensis*." This term is supported on page 3, lines 18-19, of the specification. Accordingly, Applicants request that the rejection be withdrawn.

The Office also rejected claims 21, 37, and 39 because it asserted that the parameters of the claim term "hybridization" were not set forth. As amended, these claims provide the hybridization parameters of "42°C in a solution containing 5xSSC, 30% formamide, and 1x Denhardt's," which is supported on page 22, lines 24-30, of the specification. Accordingly, Applicants respectfully request that this rejection be withdrawn.

The Office also asserted that the 5' and 3' restriction fragments recited in claim 21, were not defined. Claim 21 now recites that the 5' restriction fragment codes for amino acids 1-280 and that the 3' restriction fragment codes for amino acids 621-1175. These amino acid designations are supported on page 16, lines 7-11, of the specification. Therefore, these claim terms are defined and Applicants respectfully request that the rejection be withdrawn.

The Office rejected claims 23 and 24 because it did not understand what the claim term "elaborated from" meant. As amended, this term is not recited in the claims and, accordingly, Applicants request that the rejection be withdrawn.

Finally, the Office rejected claims 25-27 because it asserted that the description of the restriction fragments was not definite. As amended, claims 25-27 definitively identify the restriction fragments by the restriction enzymes recited or as the inserts of the recited and deposited plasmids. Because the claim terms regarding the fragments are definite, Applicants respectfully request that the rejection be withdrawn.

35 U.S.C. § 112, first paragraph

On page 3, the Office rejected claims 15-18, 21-27, 29-31, and 37-41 under 35 U.S.C. § 112, first paragraph, as not being supported by a written description. Specifically, the Office asserted that the claims do not provide a structure for the claimed nucleic acids or encoded polypeptides that corresponds to the claimed function. As amended, each of the claims provides a definite structure. For example, claims 15, 17, and 21 recite "an about 3 kb sequence of a *HindIII-PstI* DNA fragment derived from *Bacillus thuringiensis*," which provides parameters of nucleic acid structure. Furthermore, claim 21 recites parameters of "amino acids 1-280" for the 5' part of a

restriction fragment of a gene for the  $\delta$ -endotoxin of *B. thuringiensis*, and "amino acids 621-1175" for the 3' part of a restriction fragment of a gene for the  $\delta$ -endotoxin of *B. thuringiensis*. Similarly, claims 29 and 41 recite recombinant vectors that comprise "an about 3 kb sequence of a *HindIII*-*PstI* DNA fragment derived from a species of *Bacillus* . . . ." Because these independent claims provide sufficient description of structure, Applicants respectfully request that the rejection be withdrawn.

35 U.S.C. § 102(e)

On page 4, the Office rejected claims 15, 17, 18, 38, and 39 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 5,110,905, issued to Witt et al. Applicants note that claim 18 has been canceled. Claims 15 and 17, and therefore claims 38 and 39, which depend on claims 15 and 17, have been amended to provide that the nucleotide sequences are from *Bacillus thuringiensis* var. *aizawai* 7-29. Because U.S. Patent 5,110,905 does not recite nucleotide sequences from this strain of *B. thuringiensis*, it does not anticipate the claimed invention. Accordingly, Applicants respectfully request that this rejection be withdrawn.

Double-patenting rejection

On pages 4 and 5, the Office rejected claims 15-18, 29-31, 37-39, and 41 as being unpatentable under the judicially created doctrine of obviousness-type double-patenting in light of claims 1-3, 5-14, 16, and 17 of U.S. Patent 6,110,734. To further prosecution, Applicants submit a Terminal Disclaimer signed by Danielle Berneman, Director of Patents and Inventions Office of the Institut Pasteur, and by Gilles Bariteau, Director of Intellectual Property of the Institute Nationale de la Recherche Agronomic,

who are representatives of the assignees of both this application and of U.S. Patent 6,110,734. Accordingly, Applicants respectfully request that the rejection be withdrawn.

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

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By:   
Deborah Katz  
Reg. No. 51,863  
Phone: 202-408-4382  
Fax: 202-408-4400  
E-mail: [deborah.katz@finnegan.com](mailto:deborah.katz@finnegan.com)